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Section 1

Coordinated Planning

California Water Code Section 10620. (d) (2) Each urban water supplier shall coordinate the preparation of its urban water shortage contingency plan with other urban water suppliers and public agencies in the area, to the extent practicable.

All City of New Albion water sources are shared in common with other urban and agricultural interests in the area. Therefore, the City coordinated the development of this Water Shortage Contingency Plan with all involved parties:

- The New Albion County Water Authority (NACWA) and its member agencies;
- The Drake Reservoir Joint Powers Authority and its signatories;
- The Edisto Ground Water Basin, the Water Master and parties to the adjudication;
- Governmental agencies, including the County & City Health departments, County and City Planning & Building Departments, and the County Office of Emergency Services.

The New Albion County Water Agency (NACWA)

NACWA was formed to hold the County-wide entitlement for imported water. Members include the City of New Albion, four other cities, and two water districts. The City has no contractual or legal limit to the amount of NACWA water it can receive. Four of the eight NACWA agencies depend solely on imported water.

In a NACWA supply shortage, all member agencies receive a percent reduction from a five year base period average annual delivery, with additional water allotted to provide for new construction which meets efficiency requirements. However, all NACWA agencies are guaranteed (after maximum use of other available sources) a minimum health & safety per capita allocation. Since NACWA water accounts for only 13% of the City's normal water supply, if other sources remain adequate to provide 80 percent of normal supply, the City has agreed to forgo its NACWA allotment so that it could be distributed to agencies which depend completely on imported water.

The NACWA water agencies are developing a mutual aid agreement, which is expected to be ratified by all parties by June 1992. This agreement addresses the distribution and redistribution of water during shortages as well as disasters. At present, three of the four NACWA members with other supplies are physically unable to provide emergency water to the other NACWA agencies. A NACWA-wide water distribution system which will allow the transfer of water among all NACWA members is being designed. It will include standby generators and pumps to reverse flows in pipelines, and should be completed by late 1993. Those agencies without other sources also plan to increase their reserve storage capacity (currently five days) by building a joint storage facility.

NACWA members met three times to discuss the development of this and other agencies' Water Shortage Contingency Plans. In declared shortages, when more extensive coordination is necessary, members meet as frequently as necessary.

NACWA meet monthly to coordinate planning efforts, education and public information, and other water management activities. As a result of these meetings, all NACWA member agencies have adopted compatible rationing period landscape restrictions and identical "no-waste" ordinances. The no-waste ordinance adopted by the City of New Albion is attached to this plan as Appendix 2.

Local Surface water from Drake Reservoir

Drake Reservoir is owned and operated under a joint powers agreement by the City and three agricultural water districts. All agencies have equal priority for use. The agencies usually meet quarterly, but met more often during this declared shortage. The agricultural districts are currently developing their own coordinated Water Shortage Contingency Plans.

Adjudicated Edisto Ground Water Basin

Ground water from Edisto Basin is adjudicated, and managed by a Water Master. The City coordinated this Plan with the Water Master and reached the following agreement. During a declared water shortage, the City is allowed to pump additional water for a limited period. However, due to the potential for saline intrusion, the Water Master will closely monitor this additional pumping.

Disaster Planning

Water shortage disaster response has been coordinated with the County Office of Emergency Services and water shortage planning is now incorporated into the County Disaster Plan. The City and County Plans are coordinating the acquisition of standby generators, water purification supplies, emergency drinking water storage, and water trucks. Water storage, treatment and pumping facilities have been inspected for earthquake safety and will be inspected annually.

City of New Albion Water Shortage Coordination

The City established a Water Shortage Response Team, chaired by the Water Department Manager. Departments represented include Public Works, Fire, Building, Health, Public Affairs, Sanitation, and the Mayor's Office. The team has met and reviewed this Water Shortage Contingency Plan, and will meet quarterly during normal supply periods. During Stage 1, 2, or 3 water shortages, the Team will meet monthly. In a Stage 4 or a disaster level shortage, the Team will meet more often if necessary.

The Building Department now provides the Water Department with monthly reports on new permit issuance, so that accurate and current customer water demand projections can be maintained. During any declared Water Shortage Emergency, the Building Department will process applications for building permits, but will not issue the actual permits until the Emergency declaration is rescinded. See Appendix III.

The City and County Planning Commissions have been advised of the short and long term water supply outlook in the area. Development guidelines to require a determination of water supply and sewer capacity impacts were recently adopted.

Public Meetings

A series of four public meetings were held on the development of this Water Shortage Contingency Plan. The City Staff proposed an allotment method for each customer type. The final version of this Water Shortage Contingency Plan was reviewed and adopted by the New Albion City Council at its meeting on January 9, 1992.

Section 2

Past, Current and Projected Water Use (1991-94)

California Water Code Section 10631. (e) (1) Past, current and projected water use and, to the extent records are available, a breakdown of those uses on the basis of residential single family, residential multifamily, industrial, commercial, governmental, and agricultural use.

The City has about 75,000 residents, a significant commercial and industrial sector and extensive agricultural activity which uses 24 percent of the City's normal deliveries. The City recently adopted a growth management plan which limits residential and commercial growth to one percent of the 1990 base, per year, for a 20 year period.

Highest current water demand is 14,000 AFY. New connections are increasing at a rate of one percent a year but, due to new construction efficiency standards, new water demand is increasing at 0.6 percent a year, or 80 AFY. Total annual demand, without improved efficiency at pre-1990 accounts, is estimated to be 14,700 AFY in 1999.

Unaccounted-for water averages seven percent and is apportioned to all account types. Single family connections average 3.4 residents with 102 gallons per person per day use (gpcd). Multifamily connections average 2.8 residents per unit and ten units per connection, with 98 gpcd. The City's total, non-agricultural, water use is 129 gpcd.

TABLE 1 Customer Types, Normal Demand and Demand Including Growth

Customer type	Connections	Highest Use AF	Projected 1991 AF	Projected 1992 AF	Projected 1993 AF	Projected 1994 AF
Single Family	11,400	4,400	4,435	4,470	4,505	4,540
Multifamily	1,300	4,000	4,025	4,050	4,075	4,100
Commercial	800	1,400	1,410	1,420	1,430	1,440
Industrial	125	300	305	310	315	320
Governmental	75	100	105	110	115	120
Agricultural	200	3,200	3,200	3,200	3,200	3,200
Recreational	30	600	600	600	600	600
TOTAL	13,930	14,000	14,080	14,160	14,240	14,320

SINGLE FAMILY and MULTIFAMILY connections are projected to increase one percent a year. Existing single-family accounts use 102 gpcd and multifamily accounts use 98 gpcd. However, efficiency requirements in new construction have reduced single family use in new homes to 80 gpcd, and multifamily use in new units has decreased to 62 gpcd.

COMMERCIAL, INDUSTRIAL, and GOVERNMENTAL demand is projected to increase between one and three percent per year.

AGRICULTURAL demand is expected to remain constant over time, since all available agricultural land is planted in high-value crops. The City's 200 agricultural accounts irrigate more than 2,000 acres - 1,350 acres of permanent crops (avocados, lemons, and grapes), 400 acres of annual crops (strawberries, vegetables, and field flowers), and 300 acres of greenhouses. These 2,000 acres are irrigated with 3,200 AFY from the City and 1,000 AFY privately pumped from the adjudicated groundwater basin. Due to the value of the permanent crops and expensive water, all City agricultural customers irrigate at or below ETo with micro-spray irrigation systems.

RECREATIONAL demand is expected to remain constant. Increased efficiency and landscape conversions at existing parks, golf courses and cemeteries will provide sufficient water savings to supply new recreational projects contained in the general plan.

Section 3

Worst Case Water Supply Availability for 12, 24 & 36 Months

California Water Code Section 10631. (e) (2) An estimate of the minimum water supply available at the end of 12, 24 and 36 months, assuming the worst case water supply shortages.

The City of New Albion has the water sources listed below. Average water supply by source and projected worst case supply by source are provided in Table 2.

TABLE 2 Supply Sources and Worst Case Supply Projections						
Source	Contractual Amount	85-89 Avg. Use	Actual 1991	Projected Worst Case 1992	Projected Worst Case 1993	Projected Worst Case 1994
Drake Reservoir	10,000	10,000	8,000	6,000	4,000	2,000
Groundwater	2,200	2,200	2,600	2,600	2,200	2,000
NACWA	no limit	1,800	630	420	420	420
Recycled Water	-----	0	0	500	1,000	1,000
TOTAL	12,200	14,000	11,230	9,520	7,620	5,420
% supply shortage			21%	33%	47%	62%

Because the projected 1993 and 1994 worst case shortages could have serious economic impacts on the community, the City has established a policy to purchase additional water to limit the water shortage to no more than 50 percent.

DRAKE RESERVOIR is owned and operated under a joint powers agreement by the City of New Albion and three agricultural water agencies in unincorporated areas of the County. Drake reservoir has a capacity of 400,000 AF and is designed to provide annual deliveries of 50,000 AFY during a seven year dry period. Under the contracts, all Drake Reservoir parties receive equal percent reductions in deliveries. The City has an entitlement of 10,000 AFY. The water quality is good and costs the City \$150 per acre foot. Reductions in deliveries are triggered by the May 1 storage levels listed in Table 3.

Assuming precipitation equal to the 1928-34 drought period, Drake Reservoir deliveries are expected to experience a 20 percent reduction one year in ten, and a 45 percent reduction one year in thirty. These reliability estimates do not include 1987-91 drought period information. Since the 1987-91 period was even drier than 1928-34, this recent data is being incorporated into new reliability calculations. Revised reliability information is expected by March 1, 1992. This will probably mean that the City's contractual entitlement will be reduced. If the 1992-94 period is as dry as the 1987-91 period, the City's Drake Reservoir supplies would decline by 20 percent each year and would equal those listed in Table 2.

TABLE 3 Drake Reservoir Staged Reductions			
Total Reservoir Storage on May 1st	% reduction	Total Deliveries	City of New Albion
400,000 - 240,001 AF	0	50,000 AF	10,000 AF
200,001 - 240,000 AF	2%	49,000	9,800
160,001 - 200,000 AF	20%	40,000	8,000
120,001 - 160,000 AF	40%	30,000	6,000
80,001 - 120,000 AF	60%	20,000	4,000
20,000 - 80,000 AF	80%	10,000	2,000
<20,000 AF	100%	0	0

GROUND WATER from the Edisto Basin provides medium quality water to the City at a treated cost of \$100 an acre foot. This groundwater basin has a safe yield of 3,200 AFY. It is adjudicated and the City may pump 2,200 AFY while overlying agricultural landowners may pump 1,000 AFY. The Basin was adjudicated because the static water level is only twenty feet above sea level and the basin would be rendered unusable by significant saline intrusion. There is no evidence of groundwater contamination from either industrial or agricultural contaminants. Due to geological features, it is unlikely that contamination from these sources will become a problem.

The City was granted the right to manage the basin for conjunctive use. Surplus supplies of surface, imported, and recycled water will be stored in the basin as a water shortage buffer. This conjunctive use program should provide a one year water shortage buffer by 1999 and a three year buffer by 2015.

During a shortage, the City has permission from the Court to pump up to 2,600 AFY for a maximum of two years. The additional water pumped must be returned within three years by reduced pumping or injection. Two years of producing 2,600 AFY would reduce the wells production potential to 2,200 AF in the third year, with a ten percent reduction each year thereafter. Estimated quantities of ground water available during 1992, 1993 and 1994 are listed in Table 2.

THE NEW ALBION COUNTY WATER AUTHORITY (NACWA) has an entitlement of 40,000 AFY of imported municipal & industrial water. NACWA delivers water to six cities and two water districts. Since NACWA provides additional water for growth and increased demand, the City has no legal or contractual limitation upon the amount of water it may receive from NACWA. For planning purposes, the City assumes that the reliable supply from this source is the 1984-89 average NACWA delivery of 1,800 AFY plus the City's one percent per year growth. This results in a 1995 reliable supply of 1,900 AFY. "Wet" years should allow the NACWA to provide the City with less expensive "surplus" imported water for injection as part of the City's water shortage buffer.

Based on the hydrology of the 1928-34 drought, NACWA expects to make full deliveries seven years in ten, have up to a 30 percent shortage three years in ten, and up to a 50 percent shortage one year in twenty. The rule used to establish these reliability estimates is currently being revised to include 1987-91 data. Disasters, such as earthquakes, could interrupt NACWA water availability for up to six months.

During 1991, the City's NACWA delivery was reduced to 35 percent of the 1990 delivery. However, for worst case planning purposes, NACWA has advised its members that three consecutive years of 1977 precipitation could result in no deliveries for 1992-94. In these circumstances, a State Water Bank would be formed and, it is projected, could provide NACWA with up to 23 percent of its normal supply. However, the cost would increase from the normal \$280 AF to a potential of \$560 AF.

A RECYCLED WATER system is currently under construction in the City and 500 AF of tertiary treated water will be available for use in 1992. The system will be fully developed by 1993 and will thereafter provide 1,000 AFY to the City's landscaping and agricultural customers. Recycled water is considered the most reliable of all the City's supplies.

Water Quality and Emergency Supplies

The City's water sources are all of medium to good quality, and no problems resulting from industrial or agricultural contamination are foreseen. Extended multi-week supply shortages due to natural disasters or accidents which damage both imported and local surface sources are unlikely, but would be severe until the groundwater buffer is established. Studies have determined that even after a severe earthquake, groundwater wells could probably be back in production within five days. The City's storage reservoirs hold sufficient treated water to meet the health & safety requirements (50 gpcd) for City residents for five days (56 AF).

Section 4 Stages of Action

California Water Code Section 10631. (e) (3) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.

The City has developed a four stage rationing plan. The City's plan includes voluntary and mandatory stages.

TABLE 4 Rationing Stages and Reduction Goals			
Shortage	Stage	Demand Reduction Goal	Type Program
up to 15%	Stage 1	15% reduction	Voluntary
15-25%	Stage 2	25% reduction	Mandatory
25-35%	Stage 3	35% reduction	Mandatory
35-50%+	Stage 4	50%+ reduction	Mandatory

PRIORITIES for use of available water, based on California Water Code Chapter 3 (see Appendix IV) and community input, are:

- HEALTH & SAFETY - interior residential and fire fighting
- COMMERCIAL, INDUSTRIAL & GOVERNMENTAL - maintain jobs & economic base
- PERMANENT CROPS - takes five to ten years to replace
- ANNUAL CROPS - protect jobs
- EXISTING LANDSCAPING - especially trees and shrubs
- NEW DEMAND - projects without permits when shortage declared

HEALTH & SAFETY water quantity calculations used to determine the interior gpcd requirements are provided below. The Stage 2 and Stage 3 health & safety allotments are 68 gpcd (33 HCF per person per year, equaling 5,800 AFY). The Stage 4 health & safety allotment is reduced to 50 gpcd (24 HCF per person per year). The total annual amount of water required to meet these health & safety needs was calculated by multiplying the appropriate gpcd times 75,000 residents.

TABLE 5 Per capita Health & Safety Water Quantity Calculations						
	Non-conserving fixtures		Habit Changes ¹		Conserving fixtures ²	
Toilets	5 flushes x 5.5 gpf =	27.5	3 flushes x 5.5 gpf =	16.5	5 flushes x 1.5 gpf =	7.5
Shower	5 min x 4.0 gpm =	20.0	4 min x 3.0 gpm =	12.0	5 min x 2.0 gpm =	10.0
Washer	12.5 gpcd (1/3 load) =	12.5	11.5 gpcd (1/3 load)=	11.5	11.5 gpcd (1/3 load) =	11.5
Kitchen	4 gpcd =	4.0	4 gpcd =	4.0	4 gpcd =	4.0
Other	4 gpcd =	<u>4.0</u>	4 gpcd =	<u>4.0</u>	4 gpcd =	<u>4.0</u>
TOTAL (gpcd) 68.0			48.0	37.0		
HCF per capita per year		33 HCF		23 HCF		18 HCF

¹ Reduced shower use results from shorter showers or reduced flow. Reduced washer use results from fuller loads.

² Fixtures include ULF 1.6 gpf toilets, 2.0 gpm showerheads and efficient clothes washers.

The Health & Safety minimum allotment was set at 68 gpcd in Stages 2 & 3 because it provides sufficient water for essential interior use with no habit or plumbing fixture changes. If individuals wish to change water use habits or plumbing fixtures, 68 gpcd is sufficient to provide for limited non-essential uses. In Stage 4, the health & safety allotment might require habit changes.

Based on the customer demand information in Table 1, Table 6 indicates the water allocated to each customer type by priority and rationing stage.

TABLE 6 Water Supply Allocated by Priority						
Stage 1						
	Residential	Comm/Indust	Ag - Perm	Recreational	Ag - Annuals	TOTAL
average use	8,400 AF	1,800 AF	2,600 AF	600 AF	600 AF	14,000 AF
Requested use	7,560	1,620	2,300	480	480	11,438
% reduction	10%	10%	10%	20%	20%	11%
Stage 2						
Priority	Residential	Comm/Indust	Ag - Perm	Recreational	Ag - Annuals	TOTAL
average use	8,400 AF	1,800 AF	2,600 AF	600 AF	600 AF	14,000 AF
Health/Safety (68 gpcd)	5,700	100	0	0	0	5,800
Commercial	0	1,250	0	0	0	1,300
Ag - Perm	0	0	2,100	0	0	2,158
Landscape/Ag	1,100	100	0	390	390	2,180
New Connections	0	0	0	0	0	0
TOTAL (AF)	6,800	1,450	2,100	390	390	11,130
% reduction	19%	19%	19%	35%	35%	21%
Stage 3						
Priority	Residential	Comm/Indust	Ag - Perm	Recreational	Ag - Annuals	TOTAL
average use	8,400 AF	1,800 AF	2,600 AF	600 AF	600 AF	14,000 AF
Health/Safety (68 gpcd)	5,700	100	0	0	0	5,800
Commercial	0	1,200	0	0	0	1,200
Agric - Perm	0	0	2,030	0	0	2,030
Landscape/Ag	450	20	0	150	150	770
New Connections	0	0	0	0	0	0
TOTAL (AF)	6,150	1,320	2,030	150	150	9,800
% reduction	27%	27%	22%	75%	75%	30%
Stage 4 - 50 gpcd						
Priority	Residential	Comm/Indust	Ag - Perm	Recreational	Ag - Annuals	TOTAL
average use	8,400 AF	1,800 AF	2,600 AF	600 AF	600 AF	14,000 AF
Health/Safety (50 gpcd)	4,200	100	0	0	0	4,300
Commercial	0	1,070	0	0	0	1,070
Agric - Perm	0	0	1,630	0	0	1,630
Landscape/Ag	0	0	0	0	0	0
New Connections	0	0	0	0	0	0
TOTAL (AF)	4,200	1,170	1,630	0	0	7,000
% reduction	50%	35%	37%	100%	100%	50%

Supply Shortage Triggering Levels

The City of New Albion has a legal responsibility to provide for the health and safety water needs of the community (see Appendix IV). In order to minimize the social and economic impact of water shortages, the City will manage water supplies prudently. This Plan is designed to provide a minimum of 50 percent of normal supply during a severe or extended water shortage. The following rationing program triggering levels are established to ensure that these policy statements are implemented.

The City's three water sources are groundwater, local surface, and imported. Rationing stages may be triggered by a shortage in one source or a combination of sources. Because Stages overlap, triggers automatically implement the more restrictive Stage, unless the City Council votes to implement the less restrictive Stage.

Shortages may trigger a Stage at any time, although Drake Reservoir supply reductions will generally take effect on May 1.

The specific criteria for triggering the City's rationing stages are listed in Table 7.

TABLE 7 Water Supply Triggering Levels (Normal Supply 14,000 AFY)			
<u>Stage</u>	<u>Percent Shortage</u>	<u>Water Shortage</u>	<u>Carry-over Shortage</u>
Stage 1	Up to 15 percent supply reduction	Combined supply reductions totaling up to 2,100 AFY	Insufficient carry-over supplies to provide 80 percent of normal supplies for next 2 years
Stage 2	15 to 25 percent supply reduction	Combined supply reductions totaling between 2,100 and 3,500 AFY	Insufficient carry-over supplies to provide 65 percent of normal supplies for next 2 years
Stage 3	25 to 35 percent supply reduction	Combined supply reductions totaling between 3,500 and 4,900 AFY	Insufficient carry-over supplies to provide 50 percent of normal supplies for next 2 years
Stage 4	35 to 50+ percent supply reduction	Combined supply reductions totaling 4,900 AFY or more	

Section 5 Mandatory Prohibitions on Water Use

California Water Code Section 10631. (e) (4) Mandatory provisions to reduce water use which include prohibitions against specific wasteful practices, such as gutter flooding.

The City adopted a "No Waste" Ordinance in 1983, please see Appendix II.

Section 6

Consumption Limits

California Water Code Section 10631. (e) (5) Consumption limits in the most restrictive stages. Each urban water supplier may use any type of consumption limit in its water shortage contingency plan that would reduce water use and is appropriate for its area. Examples of consumption limits that may be used include, but are not limited to, percentage reductions in water allotments, per capita allocations, an increasing block rate schedule for high usage of water with incentives for conservations, or restrictions on specific uses.

The City has established the following allocation method for each customer type.

Single Family	Hybrid of Per-capita and Percentage Reduction
Multifamily	Hybrid of Per-capita and Percentage Reduction
Commercial	Percentage Reduction
Industrial	Percentage Reduction
Governmental	Percentage Reduction
Agricultural - Permanent	Percentage Reduction - vary by efficiency
Agricultural - Annual	Percentage Reduction - vary by efficiency
Recreational	Percentage Reduction - vary by efficiency
New Demand	Per-capita

The specific percentage reductions at each stage and for each customer class correspond to the figures listed in Table 6.

The individual customer allotments will be based on a five year base period. This gives the City a more accurate view of the usual water needs of each account and provides additional flexibility in determining allotments and reviewing appeals. However, no allotment may be greater than the amount used in the most recent year of the five year base period.

The Water Department Manager shall classify each customer and calculate each customer's allotment according to the methods described in Appendix V. The allotment shall reflect seasonal patterns. Each customer shall be notified of their classification and allotment by mail before the effective date of the Water Shortage Emergency. New customers and connections will be notified at the time service commences. In a disaster, prior notice of allotment may not be possible; notice will be provided by other means. Any customer may appeal the Water Department Manager's classification on the basis of use or the allotment on the basis of incorrect calculation. Appeals shall be processed as set forth in Appendix V.

Section 7 Penalties or Charges for Excessive Use

California Water Code Section 10631. (e) (6) Penalties or charges for excessive use

The City of New Albion's current rate structure is provided in Table 8.

TABLE 8 Current normal rate structure					
Tier	Rate	Single Family HCF	Multifamily HCF	Commercial/Gov HCF	Rec/Landscape HCF
Essential	\$0.80	9	7	0	0
Tier 2	\$1.20	9	7	18	18
Tier 3	\$1.60	9	7	9	9
Tier 4	\$2.00	28+	22+	28+	28+
Excess 1	\$8.00				
Excess 2	\$20.00				

Please note:

- the essential tier applies only to residential accounts.
- all agricultural water is provided at the community approved subsidized rate of \$0.70 HCF (\$305 AF).
Agricultural tiers Excess 1 and 2 are \$2.80 and \$7.00 respectively.
- recycled water is provided at 80 percent of the potable price, subject to the tier structure.
- excess 1 tier applies to excess use during declared water shortages or violation of the "no-waste" ordinance.
- excess 2 tier applies to third consecutive excess use during declared water shortages or continued violation of the "no-waste" ordinance.

Service may be terminated to any customer who knowingly and willfully violates any provision of the Water Shortage Plan.

A customer who exceeds the established allotment shall pay a surcharge of four (4) times the highest tier per HCF of water for excess water delivered during the first or second billing period and a surcharge of ten (10) times the highest tier per HCF for excess water delivered during the third consecutive excess and subsequent consecutive excess billing periods. As used herein, "excess water" means the amount of water delivered in excess of the account's established allotment during any billing period. If a customer's total annual usage equals or is less than the annual allotment, any surcharge payments shall be refunded to the customer. A similar adjustment shall be made for each successive 12 month period during the term of the rationing program, or a pro-rated amount at the program's termination.

If a customer exceeds the allotted usage for three consecutive billing periods, the City may install a flow restrictor at the service meter which reduces water flow and pressure, as follows:

Third consecutive and subsequent consecutive violations - the City may install a flow restricting device of two gallon-per-minute capacity for services up to one and one-half inch size, and comparatively sized restrictors for larger services, for a period of seven days. The customer must pay a flow restrictor installation and removal charge of \$100 before the normal service will be restored.

Section 8

Analysis of Revenue and Expenditure Impacts

California Water Code Section 10631. (e) (7) An analysis of the impacts of the plan on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.

The City's normal annual income from water sales is \$8,086,927, of which the monthly meter charges provide \$1,894,438, or 24%. All surplus revenues are currently used to fund the Emergency Fund (described below), the recycled water project, and other water system capital improvements. Tables 10 and 11 are based on the Table 9 sales ranges.

TABLE 9 Projected Ranges of Water Sales by Stage						
Water Sales	Normal	Stage 2		Stage 3		Stage 4
		20%	30%	30%	40%	50%
Urban (AFY)	10,800	8,640	7,620	7,620	6,240	5,370
Agricultural (AFY)	<u>3,200</u>	<u>2,490</u>	<u>2,180</u>	<u>2,180</u>	<u>2,180</u>	<u>1,630</u>
TOTAL (AFY)	14,000	11,130	9,800	9,800	8,420	7,000

Tables 10 and 11 provide information on projected revenue impacts by Stage.

Table 10 shows the Water Department's Revenues and Expenditures, and the projected fiscal impacts of increased costs and reduced sales due to shortages.

TABLE 10 Revenues & Expenditures (no additional water purchases & no rate increases)				
Operating Revenues	Normal	Stage 2 (20%)	Stage 3 (30%)	Stage 4 (50%)
urban	\$5,216,746	\$3,731,872	\$3,166,180	\$2,231,535
agricultural	<u>975,744</u>	<u>759,251</u>	<u>664,872</u>	<u>497,020</u>
Total Water Sales	\$6,192,490	\$4,491,123	\$3,831,052	\$2,728,555
Meter Charges	<u>1,894,438</u>	<u>1,894,438</u>	<u>1,894,438</u>	<u>1,894,438</u>
Total Revenue	\$8,086,927	\$6,385,561	\$5,725,490	\$4,622,992
% reduction	0	21%	29%	43%
Operating Expenses				
salaries	\$1,600,000	1,700,000	\$1,750,000	\$1,750,000
overhead	990,000	1,050,000	1,080,000	1,080,000
cost of supply	2,224,000	1,636,400	1,677,600	1,737,600
product. & purification	300,000	270,000	250,000	250,000
transmission & distrib.	150,000	150,000	150,000	150,000
customer accounts	60,000	90,000	100,000	110,000
general & admin.	450,000	500,000	550,000	600,000
depreciation	1,200,000	1,200,000	1,200,000	1,200,000
capital projects	<u>1,000,000</u>	<u>750,000</u>	<u>0</u>	<u>0</u>
Total Operating Expenses	\$7,974,000	\$7,346,400	\$6,777,600	\$6,897,600

Surplus or (Deficiency)	\$112,927	(\$960,839)	(\$1,052,110)	(\$2,274,608)
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Table 11 contains predictions of the Water Department's Revenues & Expenditures with reduced sales (30% at Stage 2, 40% at Stage 3, and 50 % at Stage 4), the purchase of expensive additional water, increased rates, and increased costs associated with shortages. Table 11 includes:

- A 25 percent rate increase at Stage 2, a 50 percent increase at Stage 3, and a 100 percent increase at Stage 4.
- Stage 2 "cost of supply" includes no new water supplies. Stage 3 "cost of supply" includes 500 AFY of \$750 AF emergency water from Drake Reservoir. Stage 4 "cost of supply" includes 2000 AFY of \$750 AF emergency water from Drake Reservoir.
- NACWA water cost is assumed to increase from \$280 AF to \$580 AF during Stages 2, 3 & 4.

TABLE 11 Projected Revenues & Expenditures (additional water costs & rate increases)				
Operating Revenues	Normal	Stage 2 (30%)	Stage 3 (40%)	Stage 4 (50%)
urban	\$5,216,746	\$4,137,002	\$4,139,786	\$4,463,070
agricultural	<u>975,744</u>	<u>831,090</u>	<u>997,088</u>	<u>994,039</u>
Water Sales	\$6,192,490	\$4,968,092	\$5,136,874	\$5,457,110
Meter Charges	<u>1,894,438</u>	<u>1,894,438</u>	<u>1,894,438</u>	<u>1,894,438</u>
Total Revenue	\$8,086,927	\$6,862,530	\$7,031,312	\$7,351,547
% reduction	—	-15%	-13%	-9%
Operating Expenses				
salaries	\$1,600,000	\$1,700,000	\$1,750,000	\$1,750,000
overhead	990,000	1,050,000	1,080,000	1,080,000
cost of supply	2,224,000	1,825,400	2,178,600	3,363,600
product. & purification	300,000	270,000	270,000	270,000
transmission & distrib.	150,000	150,000	150,000	150,000
customer accounts	60,000	90,000	100,000	110,000
general & admin.	450,000	650,000	700,000	750,000
depreciation	1,200,000	1,200,000	1,200,000	1,200,000
capital projects	<u>1,000,000</u>	<u>750,000</u>	<u>0</u>	<u>0</u>
Total Operating Expenses	\$7,974,000	\$7,685,400	\$7,428,600	\$8,673,600
Surplus or (Deficiency)	\$112,927	(\$822,870)	(\$397,288)	(\$1,322,053)

Tables 12 and 13 provide projections of the 1992-94 cost of supply

TABLE 12 Projected worst case 1992-94 water supply with associated costs					
Supply & Cost	Normal	1991	1992	1993	1994
Drake Reservoir	10,000 AF	8,000 AF	6,000 AF	4,000 AF	2,000 AF
\$150 AF	\$1,500,000	\$1,200,000	\$900,000	\$600,000	\$300,000
Groundwater	2,200 AF	2,600 AF	2,600 AF	2,200 AF	2,000 AF
\$100 AF	\$220,000	\$260,000	\$260,000	\$220,000	\$200,000
NACWA	1,800 AF	630 AF	420 AF	420 AF	420 AF
\$280 AF	\$504,000	\$176,400	\$117,600	\$117,600	\$117,600
Recycled Water	0 AF	0 AF	500 AF	1,000 AF	1,000 AF
\$800 AF	\$0	\$0	\$400,000	\$800,000	\$800,000
Total AF	14,000 AF	11,230 AF	9,520 AF	7,620 AF	5,420 AF
Cost of supply	\$2,224,000	\$1,636,400	\$1,677,600	\$1,737,600	\$1,417,600

TABLE 13 Projected worst case supply with additional expensive supplies					
Supply & Cost	Normal	1991	1992	1993	1994
Drake Reservoir	10,000 AF	8,000 AF	6,000 AF	4,000 AF	2,000 AF
\$150 AF	\$1,500,000	\$1,200,000	\$900,000	\$600,000	\$300,000
Option Water			500 AF	2,000 AF	
\$750 AF			\$375,000	\$1,500,000	
Groundwater	2,200 AF	2,600 AF	2,600 AF	2,200 AF	2,000 AF
\$100 AF	\$220,000	\$260,000	\$260,000	\$220,000	\$200,000
NACWA	1,800 AF				
\$280 AF	\$504,000				
Water Bank		630 AF	420 AF	420 AF	420 AF
\$580 AF		\$365,400	\$243,600	\$243,600	\$243,600
Recycled Water	0 AF	0 AF	500 AF	1,000 AF	1,000 AF
\$800 AF	\$0	\$0	\$400,000	\$800,000	\$800,000
Total AF	14,000 AF	11,230 AF	9,820 AF	9,620 AF	5,420 AF
Cost of supply	\$2,224,000	\$1,825,400	\$2,178,600	\$3,363,600	\$1,543,600
(Desalination)					4,000 AF
\$1,800 AF					(\$7,200,000)

To provide water during a severe extended shortage, the City has started design and will obtain permits to construct a 4,000 AFY sea-water desalination plant. Construction of the plant is estimated to require twelve months. The desalinated water is projected to cost \$1,800 AF, or more than \$7 million annually for 4,000 AF per year. This would more than double Water Department expenditures and would require at least a 400 percent increase in water rates.

Establishment of a Rate Stabilization Fund

In order to mitigate the financial impacts of a water shortage, the City is establishing an Emergency Fund. The goal is to maintain the Fund at 75 percent of normal Water Department revenue. This fund will be used to stabilize rates during periods of water shortage or disasters affecting the water supply. The City will not have to increase rates as much or as often during a prolonged or severe shortage.

However, even with the emergency fund, rate increases will be necessary during a prolonged water shortage. As described in Section 4 of this Plan, a Stage 2 shortage requires a 20 percent reduction in water deliveries while a Stage 3 requires a 35 percent reduction. The experiences of California water purveyors during the 1990-91 drought shortage demonstrated that actual water use reductions by customers are usually considerably larger than those requested by the supplier. During the 1990-91 drought shortage it was also politically difficult for many agencies to adopt the rate increases necessitated by a 20 to 50 percent reduction in sales. When a Water Shortage Emergency is declared, the supply shortage will trigger the appropriate Rationing Stage and rate increase.

Water rates increase by the following percentages when the indicated Stages are implemented:

Stage 1	no rate increase
Stage 2	25 percent increase over pre-shortage rates
Stage 3	50 percent increase over pre-shortage rates
Stage 4	100 percent increase over pre-shortage rates
End of the Water Shortage Emergency	15 percent increase over pre-shortage rates

Most California water agencies which experienced water shortages found that it required several years for customer gpcd to return to pre-shortage levels. Thus, in anticipation of reduced sales following a shortage, the City's rates will be set at 115 percent of the pre-shortage rates. After a shortage, Water Department expenses are expected to drop below pre-shortage levels (to \$7,674,000 from \$7,974,000). Water use is projected at 90 percent of the pre-shortage use, so the 115 percent rate should generate sufficient income (\$7,675,261) to equal expenses. Any excess revenues collected as a result of this rate adjustment will be used to re-establish the Emergency Fund.

Section 9

Implementation of the Plan

California Water Code Section 10631. (e) (8) A draft water shortage contingency resolution or ordinance to carry out the urban water shortage contingency plan.

The City adopted a Resolution to Declare a Water Shortage Emergency which will implement this Plan, please see Appendix VI

Section 10 Water Use Monitoring Procedures

California Water Code Section 10631. (e) (9) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency plan.

Normal Monitoring Procedure

In normal water supply conditions, production figures are recorded daily. Totals are reported weekly to the Water Treatment Facility Supervisor. Totals are reported monthly to the Water Department Manager and incorporated into the water supply report.

Stage 1 and 2 Water Shortages

During a Stage 1 or 2 water shortage, daily production figures are reported to the Supervisor. The Supervisor compares the weekly production to the target weekly production to verify that the reduction goal is being met. Weekly reports are forwarded to the Water Department Manager and the Water Shortage Response Team. Monthly reports are sent to the City Council. If reduction goals are not met, the Manager will notify the City Council so that corrective action can be taken.

Stage 3 and 4 Water Shortages

During a Stage 3 or 4 water shortage, the procedure listed above will be followed, with the addition of a daily production report to the Manager.

Disaster Shortage

During a disaster shortage, production figures will be reported to the Supervisor hourly, and to the Manager and the Water Shortage Response Team daily. Reports will also be provided to the City Council and the New Albion County Office of Emergency Services.

Section 11

Plan Adoption Standards

California Water Code Section 10621 (a) Each urban water supplier shall, not later than January 31, 1992, prepare, adopt, and submit to the department an amendment to its urban water management plan which meets the requirements of subdivision (e) of Section 10631.

The City of New Albion prepared this Water Shortage Contingency Plan during November and December 1991. The Plan was adopted on January 9, 1992 (see Appendix I) and submitted to the Department of Water Resources on January 22, 1992. The Plan includes all the information necessary to meet the requirements of subdivision (e) of California Water Code Section 10631.

California Water Code Section 10642 Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to California Water Code Section 6066 of the Government Code. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

Public meetings and the availability of copies of the draft water shortage contingency plan were properly noticed in the City's newspapers. Copies of the draft plan were available for public review at City offices and the Public Library. The City held four public meetings on the Water Shortage Contingency Plan:

- one meeting focused on residential water rationing programs
- one focused on commercial, industrial and governmental rationing options
- one focused on agricultural water rationing options
- a final meeting was held to present the completed Plan, which was supported unanimously by the City Council.

The 1992 Water Shortage Contingency Plan for the City of New Albion was formally adopted at a duly noticed City Council Meeting on January 9, 1992

California Water Code Section 10656 An urban water supplier that does not submit an amendment to its urban water management plan pursuant to subdivision (a) of Section 10621 to the department by January 31, 1992, is ineligible to receive drought assistance from the state until the urban water management plan is submitted pursuant to Article 3 (commencing with Section 10640) of Chapter 3.

The City of New Albion submitted a Water Shortage Contingency Plan to the Department of Water Resources on January 22, 1992.

RESOLUTION 92-1

**A RESOLUTION ADOPTING
THE WATER SHORTAGE CONTINGENCY PLAN**

WHEREAS, the California Legislature enacted Assembly Bill 11X during the 1991 Extraordinary Session of the California Legislature (an act to amend California Water Code Sections 10620, 10621, 10631, and 10652, and to add Section 10656 to the California Water Code, relating to water); and

WHEREAS, AB11X mandates that every urban water supplier providing municipal water directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually to develop a Water Shortage Contingency Plan; and

WHEREAS, AB 11X mandates that said Plan be filed with the California Department of Water Resources by January 31, 1992; and

WHEREAS, the City of New Albion is an urban supplier of water forbidding water to more than 3,000 customers, and has therefore, prepared and circulated for public review a Draft Water Shortage Contingency Plan, in compliance with the requirements of AB 11X, and a properly noticed public hearing regarding said Draft Plan was held by the City Council on January 9, 1992, and a Final Water Shortage Contingency Plan prepared;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of New Albion as follows:

1. The Water Shortage Contingency Plan is hereby adopted and ordered filed with the City Clerk;
2. The City Manager is hereby authorized and directed to file this Plan with the California Department of Water Resources;
3. The City Manager is hereby authorized to declare a Water Shortage Emergency and implement this Water Shortage Contingency Plan;
4. The City Manager shall recommend to the City Council regarding additional procedures, rules, and regulations to carry out effective and equitable allocation of water resources during a water shortage.

Appendix II

"No Waste" Ordinance

Ordinance 83-12

AN ORDINANCE OF THE CITY OF NEW ALBION
AMENDING CHAPTER 14 OF THE NEW ALBION MUNICIPAL CODE
TO ADD SECTION 11 FOR WATER CONSERVATION IN THE CITY OF NEW ALBION

The City Council of the City of New Albion does hereby resolve as follows:

The Municipal Code of the City of New Albion is hereby amended by adding a Section 11 to Chapter 14, to read as follows:

14-11.1 PROHIBITING WASTEFUL USE OF WATER

REGULATIONS AND RESTRICTIONS ON WATER USE

It is hereby resolved by the City Council that in order to conserve the City's water supply for the greatest public benefit, and to reduce the quantity of water used by the City's customers, that wasteful use of water should be eliminated. Customers of the City shall observe the following regulations and restrictions on water use:

1. No customer shall waste water. As used herein, the term "waste" means:
 - a. Use of potable water to irrigate grass, lawns, ground-cover, shrubbery, crops, vegetation, and trees (agricultural accounts are excluded from the time of irrigation restriction) between the hours of 10:00 o'clock A.M. and 6:00 o'clock P.M. or in such a manner as to result in runoff for more than five (5) minutes;
 - b. Use of potable water to wash sidewalks, walkways, driveways, parking lots, open ground or other hard surfaced areas except where necessary for public health or safety;
 - c. Allowing potable water to escape from breaks within the customer's plumbing system for more than twenty-four (24) hours after the customer is notified or discovers the break;
 - d. Washing cars, boats, trailers, aircraft, or other vehicles by hose without a shutoff nozzle and bucket except to wash such vehicles at commercial or fleet vehicle washing facilities using water recycling equipment.
2. The following restrictions are effective during a declared Water Shortage Emergency.
 - a. No restaurant, hotel, cafe, cafeteria or other public place where food is sold, served or offered for sale, shall serve drinking water to any customer unless expressly requested.
 - b. Use of potable water to clean, fill or maintain decorative fountains, lakes or ponds unless such water is reclaimed.
 - c. Use of potable water for construction, compaction, dust control, street or parking lot sweeping, building wash-down where non-potable or recycled water is sufficient.
 - d. Use of potable water for sewer system maintenance or fire protection training without prior approval by the City Manager;
 - e. Use of potable water for any purpose in excess of the amounts allocated below for each class of service.

Appendix III

Moratorium on New Connections During a Water Shortage

Ordinance 89-6

AN ORDINANCE OF THE CITY OF NEW ALBION

AMENDING CHAPTER 12 OF THE NEW ALBION MUNICIPAL CODE TO ADD SECTION 7 ESTABLISHING A MORATORIUM ON NEW CONNECTIONS DURING A WATER SHORTAGE

The City Council of the City of New Albion does hereby resolve as follows:

The Municipal Code of the City of New Albion is hereby amended by adding a Section 7 to Chapter 12, to read as follows:

12-7.1 MORATORIUM ON SERVICE COMMITMENTS AND CONNECTIONS

1. When the City declares a water shortage emergency the following regulations shall become effective immediately and shall continue in full force and effect to prohibit the following while it remains in full force and effect:
 - a. The City shall not issue oral or written commitments to provide new or expanded water service, including will-serve letters.
 - b. The City shall not sell meters for water service connections, despite the prior issuance of will-serve letters or other oral or written service commitments, unless building permits have been issued.
 - c. The City shall not provide new or expanded water service connections, despite the prior issuance of will-serve letters or other oral or written service commitments and meters, unless building permits have been issued.
 - d. The City shall not provide water for use on any new plantings installed after the declaration of a Water Shortage Emergency.
 - e. The City shall not annex territory located outside the City's service boundary.
2. The following uses are exempt from the moratorium and upon application to the City shall receive necessary water service commitments and connections to receive water from the City:
 - a. Uses, including but not limited to, commercial, industrial, single and multifamily residential, for which a building permit has been issued by the City on or before the declaration of a Water Shortage Emergency.
 - b. Uses, including but not limited to, commercial, industrial, single and multifamily residential, for which a retail meter had been purchased from the City before the declaration of a Water Shortage Emergency, as evidenced by a written receipt and for which a building permit has been issued and remains in full force and effect.
 - c. Publicly owned and operated facilities, including but not limited to schools, fire stations, police stations, and hospitals and other facilities as necessary to protect the public health, safety and welfare.

Appendix IV Customer Allotments and Appeal Procedure

The following is the City's rationing allocation method by customer type and stage and the appeals procedure. These rules and procedures were adopted as part of the City's Water Shortage Contingency Plan.

Stage 1 Minimal shortage up to 15 percent Voluntary Program

The City of New Albion shall:

- notify all customers of the water shortage
- mail information to every customer explaining the importance of significant water use reductions
- provide technical information to customers on ways to improve efficiency
- conduct media campaign to remind consumers of the need to save water
- publicize and expand the toilet rebate, showerhead and other efficiency programs.
- request agricultural customers to delay planting new permanent crops

Stage 2. Moderate 15 to 25 percent shortage Mandatory Program

In addition to the actions listed in Stage 1, the City shall establish mandatory annual allotments for each connection based on the average use during a five year base period selected by the Water Shortage Team.

1. Each single family residential connection shall receive no more than 132 (HCF) per year (11 HCF per month) plus 40 percent of the average annual usage in excess of 132 HCF.
2. Each multifamily residential unit shall receive no more than 84 HCF year (7 HCF per month) plus 40% of the average annual usage in excess of 84 HCF.
3. Each commercial, industrial and governmental connection shall receive no more than 81% of the average annual usage.
4. Each landscape connection shall receive 40% of the average annual usage. Each account determined by City staff to meet the City's Landscape Guidelines for xeriscape design, irrigation and maintenance shall receive 80% of the average annual usage.
5. Each agricultural "permanent crop" connection shall be allocated between 75% and 85% of the average annual usage, depending on the efficiency³ of irrigation water use. Each customer shall provide the Water Department Manager a irrigation efficiency report including type, age, acreage and irrigation system specifics for each crop. Customers not submitting reports will receive the minimum 75% allotment.
6. Each agricultural "annual crop" or recreational connection shall be allotted between 60 and 70 percent of the average usage, depending on the efficiency³ of the water use. Each customer shall provide the Water Department Manager an irrigation efficiency report including type, age, acreage and irrigation system specifics for each crop or plant type. Customers not submitting reports receive the minimum 60 percent allotment.
7. No building permits will be issued or meters installed for new accounts which had not received building permits before the water shortage emergency declaration. (See Appendix III)

Stage 3 Severe 25 to 35 percent shortage Mandatory Program

In addition to the actions listed in Stage 1, the City shall establish mandatory annual allotments for each connection based on the average use during a five year base period selected by the Water Shortage Team.

³ Agricultural efficiency is determined by comparing the water demand per crop (i.e., type, age and number of trees, soil type, geography, evapotranspiration, etc.) with the water use for that crop. Farmers determined to be under-irrigating receive the smallest reduction possible in that rationing stage and those over-irrigating receive the largest reduction for that rationing stage.

1. Each single family residential connection shall receive no more than 132 (HCF) per year (11 HCF per month) plus 20% of the average annual usage in excess of 132 HCF.
2. Each multifamily residential unit shall receive no more than 84 HCF year (7 HCF per month) plus 20% of the average annual usage in excess of 84 HCF.
3. Each commercial, industrial and governmental connection shall receive no more than 73% of the average annual usage.
4. Each landscaping connection shall receive 20% of the average annual usage. Each account determined by City staff to meet the City's Landscape Guidelines for xeriscape design, irrigation and maintenance shall receive 70% of the average annual usage.
5. Each agricultural "permanent crop" connection shall be allocated between 73% and 83% of the average annual usage, depending on the efficiency³ of irrigation water use. Each customer shall provide the Water Department Manager a irrigation efficiency report including type, age, acreage and irrigation system specifics for each crop. Customers not submitting reports will receive the minimum 70% allotment.
6. Each agricultural "annual crop" or recreational connection shall be allotted between 20 and 30 percent of the average usage, depending on the efficiency³ of the water use. Each customer shall provide the Water Department Manager an irrigation efficiency report including type, age, acreage and irrigation system specifics for each crop or plant type. Customers not submitting reports receive the minimum 20 percent allotment.
7. No building permits will be issued or meters installed for new accounts which had not received building permits before the water shortage emergency declaration.

Stage 4 Critical 35 to 50+ percent shortage Mandatory Program

In addition to the actions listed in Stage 1, the City shall establish mandatory annual allotments for each connection based on the average use during a five year base period selected by the Water Shortage Team.

1. Each single family residential connection shall receive no more than 24 HCF per year (2 HCF per month) per permanent resident.
2. Each multifamily residential unit shall receive no more than 24 HCF year (2 HCF per month) per permanent resident.
3. Each commercial, industrial and governmental connection shall receive no more than 65% of the average annual usage.
4. Each landscaping connection shall receive no allotment. Each account determined by City staff to meet the City's Landscape Guidelines for xeriscape design, irrigation and maintenance shall receive 65% of the average annual usage.
5. Each agricultural "permanent crop" connection shall be allocated between 58% and 68% of the average annual usage, depending on the efficiency³ of irrigation water use. Each customer shall provide the Water Department Manager a irrigation efficiency report including type, age, acreage and irrigation system specifics for each crop. Customers not submitting reports will receive the minimum 65% allotment.
6. Each agricultural "annual crop" connection or recreational connection shall receive no water.
7. No building permits will be issued or meters installed for new accounts which had not received building permits before the water shortage emergency declaration.

Appeals Procedure

1. Any person who wishes to appeal their customer classification or allotment shall do so in writing by using the forms provided by the City.
2. Appeals will be reviewed by the Rationing Manager and site visits scheduled if required.
3. A conditional of approval shall be that all applicable plumbing fixtures or irrigation systems be replaced or modified for maximum water conservation.
4. Appeals may be granted for the following:
 - a. Substantial medical requirements.
 - b. Residential connections with more than four residents in a single family household or three residents per unit at multifamily accounts can receive 24 HCF per year per additional person. During a Stage 4 shortage, a census may be conducted to determine the actual number of residents per living unit. Water will be granted to permanent residents - defined as five days a week, nine months a year.
 - c. Commercial/Industrial accounts where water supply reductions will result in unemployment or decreased production, after confirmation by a City water auditor that the account has instituted all applicable water efficiency improvements.
 - d. Nonagricultural customers can appeal for 12 HCF per year per horse, cow or other large animal and six HCF per year for each efficiently irrigated mature fruit tree.
 - e. Government agencies (parks, schools, county, etc.) may have separate account allotments combined into one "agency" allotment.
5. In the event an appeal for additional allotment is requested for irrigation of trees or vegetation in residential categories or for any agricultural use, the City staff may use the services of a qualified consultant in determining the validity of the request.
6. The Water Shortage Team shall approve or deny appeals.
7. If the Water Shortage Team and the applicant are unable to reach accord, then the appeal shall be heard by the City Manager, who will make the final determination.
8. All appeals shall be reported monthly to the City Council as a part of the Water Supply Report.

RESOLUTION 92-XX

**A MODEL RESOLUTION ESTABLISHING
THE CRITERIA TO DECLARE A WATER SHORTAGE EMERGENCY**

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of New Albion as follows:

PURSUANT to California Water Code Section 350 et seq., the Council has conducted duly noticed public hearings to establish the criteria under which a water shortage emergency may be declared.

WHEREAS, the Council finds, determines and declares as follows:

- (a) During 1990 the City served approximately 14,000 acre feet per year (AFY) of water to City property owners and inhabitants;
- (b) The City is allowed to extract 2,200 AFY from the Edisto groundwater basin, obtain 10,000 AFY from Drake Reservoir and purchase approximately 1,800 AFY from the New Albion County Water Authority.
- (c) The demand for water service by City inhabitants and property owners is not expected to lessen.
- (d) For the foregoing reasons, when the amount of water supply available to the City for service to customers falls below the Stage 2 triggering levels established in Section 4 of the Water Shortage Contingency Plan, the City has determined that the water supply will not be adequate to meet the ordinary demands and requirements of water consumers without depleting the water supply of the City to the extent that there would be insufficient water for human consumption, sanitation and fire protection and this condition is likely to exist until precipitation and inflow dramatically increases and therefore,

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of New Albion hereby directs the City Manager to find, determine, declare and conclude that a water shortage emergency condition exists that threatens the adequacy of water supply for human consumption, sanitation and fire protection requirements, until the City's water supply is deemed adequate. After the declaration of a water shortage emergency, the City Manager is directed to determine the appropriate Rationing Stage and implement the City's Water Shortage Contingency Plan.

FURTHERMORE, the Council shall periodically conduct proceedings to determine additional restrictions and regulations which may be necessary to safeguard the adequacy of the water supply for domestic, sanitation and fire protection requirements.